OCT 27 1987

ED 270 247568

THE Northwest Regional Educational Laboratory

TECHNOLOGY PROGRAM

Vol 4 - 3

COMPLETED

ED247568

PRODUCT DESCRIPTIONS: DATABASE SOFTWARE FOR SCIENCE

A MicroSIFT Quarterly Report

November 1986

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

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SE 047 668

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DOCUMENT RESUME

ED 277 568 SE 047 668

AUTHOR Batey, Anne; And Others
TITLE Product Descriptions: Database Software for Science. A MicroSIFT Quarterly Report.
INSTITUTION Northwest Regional Educational Lab., Portland, Oreg.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Nov 86
CONTRACT 400-86-0006
NOTE 24p.; For a related document, see SE 047 667.
PUB TYPE Computer Programs (101) -- Reference Materials - Directories/Catalogs (132)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Computer Science Education; *Computer Software Reviews; Computer Uses in Education; *Database Producers; *Databases; Elementary Secondary Education; Information Retrieval; Information Storage; Instructional Improvement; Instructional Materials; Science Education; Science Instruction; *Science Materials

ABSTRACT

Specific programs and software resources are described in this report on database software for science instruction. Materials are reviewed in the categories of: (1) database management (reviewing AppleWorks, Bank Street School Filer, FileVision, Friendly Filer, MECC DataQuest: The Composer, Scholastic PFS:File, PFS:Report); (2) data files (providing system requirements, software description, supplementary materials, producer policies, and comments for nine specific programs); and (3) dedicated databases (containing descriptions of Classification, Holt Science Processors, and Information Laboratory Software: Life Science). Producer information is also provided and includes addresses and phone numbers of the identified companies. (ML)

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APPLEWORKS

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Apple	$250.00	AP	4-12	Varies	DBM	None

SYSTEM REQUIREMENTS: 128K Apple IIe or IIc, two disk drives, monitor, printer (optional)

SOFTWARE DESCRIPTION: Includes one disk with the AppleWorks start-up programs on one side and the AppleWorks Programs on the other, a tutorial disk and a disk containing sample data. The AppleWorks program consists of integrated word processing, database management and spreadsheet components.

SUPPLEMENTARY MATERIALS: Includes a 140-page Tutorial Manual, 319-page Reference Manual (32 pages pertain to the database component) and a Quick Reference Card.

COMMENTS:

- The database is extremely flexible; it allows addition of new fields, renaming fields, and changing field locations on the screen after the database has been created.
- The size of a file is limited by the number of characters which will fit into the internal memory of the machine, about 10K for a 64K Apple and 51K for a 128K Apple.
- The integration with spreadsheet and word processing makes AppleWorks very useful. Being able to move information from the database into a word processing document or spreadsheet enhances a database activity.

BANK STREET SCHOOL FILER

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Sunburst	$99.00	AP	4-12	Varies	DBM	None

SYSTEM REQUIREMENTS: 64K Apple II+, IIe or IIc, one or two disk drives, extended 80-column card (required for 128K version), printer (optional)

SOFTWARE DESCRIPTION: Includes a Bank Street School Filer disk containing the database management software, a back-up disk, a tutorial disk, a classroom tools disk containing file management utility programs and a school database disk with sample files.

SUPPLEMENTARY MATERIALS: Includes a 167-page Teacher's Guide, a 112-page Reference Manual, and a Quick Reference Card. The Teacher's Guide includes a teacher tutorial which corresponds to some of the sample files, seven lessons on how to introduce students to file management, three student activities, a section on how to organize for the instructional use of file managers, a list of additional curriculum ideas and reproducible worksheets for 29 classroom activities.

COMMENTS:

- The number of records a file may have is limited to a maximum of 256 records on a 64K Apple II or 512 records on a 128K Apple II. The actual capacity of a file is likely to be less than these figures. It will depend on the amount of information contained in each record.
- Includes an easy-to-follow tutorial.

FILEVISION

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Telos	$78.00	MC	7-16	Varies	DBM	None

SYSTEM REQUIREMENTS: Apple MacIntosh

SOFTWARE DESCRIPTION: Includes one 3.5 inch diskette containing the database management software and two sample files. One sample file, entitled MAP, displays a map of the 48 states and contains records of information about each state and fictitious field offices in various states. The other sample file contains the inventory of a fictitious wine cellar. FileVision makes use of the graphics capabilities of the Macintosh by associating each record with a visual image on the screen. The results of searches are demonstrated by highlighting the associated image. For example, the MAP database could be searched for all states entering the union after 1893. Those states identified by the search would be highlighted on the map. A graphics utility is available for creating drawings.

SUPPLEMENTARY MATERIALS: Includes a 154-page manual containing program operating instructions.

COMMENTS:

- An object is an image created using the computer graphics feature. Each object is then associated with a data record. Data records may be one of up to 16 types, each type containing up to 30 fields.
- The program is very easy to learn to use. It makes excellent use of graphics to display the results of a search.
- The program does not perform calculations.
- Telos Software sponsors a public domain library of FileVision databases and templates, some of which are appropriate for education. Contact Telos Software for more information (see Producer List).
- Much of the educational use of FileVision is going on at the postsecondary level. Interesting applications of FileVision can be found at Mississippi State College of Veterinary Medicine, University of Utah Center for Archaeology, Northwestern University, University of Washington Center for Social Science, Portland State University, University of Oregon and San Francisco State University, to name a few.

FRIENDLY FILER

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Grolier	$54.95	AP CO IB	4-12	Varies	DBM	DOS 2.0 for IBM

SYSTEM REQUIREMENTS: 64K Apple II family, one disk drive and printer interface in slot #1. Commodore 64 or 128 with one disk drive. 128K IBM PC, XT or PCjr with one disk drive.

SOFTWARE DESCRIPTION: Includes one disk and one back-up disk containing the database management software, an introduction to database management, a tutorial on how to use Friendly Filer, and a sample data file containing information on twenty animals.

SUPPLEMENTARY MATERIALS: Includes a 24-page User's Guide and a 16-page Instructor's Guide. The User's Guide provides background information, program operating instructions and suggested applications. The Instructor's Guide includes learning objectives, teacher's instructions and suggested classroom activities.

COMMENTS:

- Because Friendly Filer is very easy to use, it makes an excellent introductory database package
- The tutorials and sample data files are a very nice feature but the tutorials are slow moving
- The major weakness of this package is that it only allows for seven fields per record

MECC DATAQUEST: THE COMPOSER

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
MECC	$49.00	AP	5-12		DBM	None

SYSTEM REQUIREMENTS: 64K Apple II+, IIe or IIc with one disk drive, monitor and printer (optional). 128K required for authoring with the composer. Databases created using the composer will run on 64K machines.

SOFTWARE DESCRIPTION: Includes one disk, one backup disk and a manual. This is a teacher utility that produces database disks. It enables the user to create and edit databases containing any type of information. It is possible to search, sort, format and print reports containing database information.

SUPPLEMENTARY MATERIALS: Includes an 85-page Teacher's Manual including explanation of the program, the database disk, student activities, Quick Reference Card and student handouts.

COMMENTS:

- Each database disk can contain a maximum of 254 records, with up to 64 categories. A category can contain up to 64 entries
- Once the database is created, you do not need the program to use it
- Information may not be edited nor added using the data file disk alone

SCHOLASTIC PFS:FILE
SCHOLASTIC PFS:REPORT

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ. SOFTWARE
Scholastic	see below	AP IB	7-12	Varies	DBM	DOS for IBM

SYSTEM REQUIREMENTS: 64K or 128K Apple IIe or IIc, one disk drive, monitor and printer. Versions are available for both Apple DOS 3.3 and PRODOS. If PFS:report and/or graph are used, two disk drives are required. 128K IBM PC with one disk drive monitor and printer.

COST: PFS:file --$ 99.95, PFS:file lab pack --$185.00
PFS:report--$134.95, PFS:report lab pack--$185.00

SOFTWARE DESCRIPTION: Each regular package includes one program disk, a back-up disk and a learning activities disk containing sample files. Lab packs include five program disks and five learning activities disks. PFS:file is required in order to use PFS:report.

SUPPLEMENTARY MATERIALS: PFS:file includes one manual containing detailed operating instructions and teaching guide outlining fourteen learning activities using the program and sample data files. PFS:report includes one manual containing a teaching guide and learning activities. Both include a Reference Guide, Quick Reference Card, Glossary and Troubleshooting Instructions.

COMMENTS:

- The maximum number of records is limited to the space available on one data disk. A typical file of ten fields would hold around 400 or 500 records on the Apple, or around 1400 on an IBM depending upon the length of the fields.
- PFS:graph from Software Publishing Corporation or Scholastic ($134.95), enables the user to quickly construct line, bar or pie charts from the data stored on a PFS:file data disk.
- The PFS series is generally easy to learn and use. The supplementary materials are very complete.
- The package provides a means of modifying a file once data has been entered; however, the process takes a long time to complete particularly if the file is large.

ANIMAL LIFE DATABASES

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Sunburst	$59.00	AP	4-8	Animals	Data	Bank Street School Filer

SYSTEM REQUIREMENTS: 64K Apple IIe/IIc/II+, Commodore 64 or 128. Printer optional.

SOFTWARE DESCRIPTION: Includes one disk and a Teacher's Guide. A collection of seven databases which may be used independently. The first file, "Animals," lists data for 60 animals. Two other files, "Warm" and "Cold," divide the animal file between warm-blooded and cold-blooded animals. Other files include "Books," "Glossary" (51 terms used in these databases), and "Pets" (18 records). Students can add records to these files. The seventh file, "Lab," allows students to research and analyze an experiment on the eating habits of land snails. These databases are designed to be used with the Bank Street School Filer. Written for the junior high student, they are easily adapted to be used with fourth grade through senior high school.

SUPPLEMENTARY MATERIALS: In the 112-page Teacher's Guide there is a section for each of the seven database files which includes teacher instructions, description on database and animals covered, sample records, student activity sheets and answer key.

PRODUCER POLICIES: Free 30-day trial, plus lifetime replacement warranty. Not copy protected, producer expects data files to be copied for classroom use. A 10-disk lab pack (plus teacher's guide) is available for $177.

COMMENTS:

- Assumes students have a basic understanding of how to use Bank Street School Filer.

APPLEWORKS DATABASES: CLIMATE AND WEATHER

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Scholastic	$79.95	AP	7-12	Weather Climate	Data	AppleWorks

SYSTEM REQUIREMENTS: 128K Apple IIe/IIc, monitor, printer

SOFTWARE DESCRIPTION: Three disks, a backup for each, and teacher's guide. Two learning units, based on two complete databases, "Weather" and "Local Climate" may be used independently of each other. Students become researchers using real data from the National Oceanographic and Atmospheric Administration. Seventy-seven locations are featured, covering a wide variety of land areas in the United States. Students may also create their own database. For example, students may research a specific locale, which could be compared to another land area. Using the database and spreadsheet tools of AppleWorks, students test their own hypotheses concerning relationships of various geographic features (e.g., latitude, longitude, altitude, bodies of water, mountains) to climate and weather (e.g., percipitation, relative humidity, cloud cover, wind, barometric pressure and temperature). There is an optional generalized lab experiment template which may be adapted to various grade levels.

SUPPLEMENTARY MATERIALS: There are two teaching guides, one on Weather and one on Local Climate, both of which include teacher instructions, lab report outlines, lesson plans, student handouts, scope and sequence charts, and other materials needed to manage the learning activities. Also included for both units are AppleWorks Instructional Modules (AIMS) which are self-study, hands-on instructions that teach the AppleWorks skills needed to support the learning activities.

PRODUCER POLICIES: 30-day preview. 60-day warranty; the following ten months require a $10 replacement fee.

COMMENTS:

- Support materials guide the teacher and student through AppleWorks, however, it would be to the teacher's advantage to know AppleWorks.
- Units also make use of the Appleworks spreadsheet.

DATABASES IN THE CLASSROOM: SCIENCE

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
MECC	$49.00	AP	6-12	Science	Data	AppleWorks or Dataquest Composer

SYSTEM REQUIREMENTS: 64K Aple IIe/IIc, 80 column display card

SOFTWARE DESCRIPTION: One disk, backup and teacher's manual. Data files in numerous subjects, including four in science. "Elements" has information on 105 elements, described with symbol, atomic number and weight, density, group, state, melting and boiling points, radioactivity, and year discovered. "Mammals" lists 140 animals, giving the infraclass, order, family, genus and species. There are two other databases, "Creatures" and "Parasites."

SUPPLEMENTARY MATERIALS: A 103-page Teacher's Guide to using databases with AppleWorks or Dataquest Composer, suggested lesson plans, student activity pages using science topics.

PRODUCER'S POLICIES: Lab kits are available for $89 (five disks and a teacher's manual).

COMMENTS:

- Perhaps best used in a contained classroom where the teacher wants to work on databases in general. Students could then select a science topic.
- These datafiles come in two versions: one for the AppleWorks DBM and one for MECC's DataQuest Composer.

ENDANGERED SPECIES DATABASES

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Sunburst	$59.00	AP CO	4-8	Endangered Spieces	Data	Bank Street School Filer

SYSTEM REQUIREMENTS: 64K Apple II+/IIe/IIc, Commodore 64 or 128. Printer optional.

SOFTWARE DESCRIPTION: Includes one disk and a Teacher's Guide. Six files inlcude "Mammals" (44 records listed by the U.S. Fish and Wildlife Service under the United States Endangered Species Act); "Critical" (40 records of some of the most endangered special); "Extinct" (202 records of extinct birds, mammals, reptiles and amphibians) and "Glossary" (48 terms used in these databases). "Books" contains 35 books about endangered animals and students are encouraged to add fiction and nonfiction. The sixth file, "Local," allows students to enter records of local threatened or endangered animals. Printed material includes ways to locate data for this file. These databases, while written for junior high level, may be easily adapted for use in grades 4-12.

SUPPLEMENTARY MATERIALS: In the comprehensive 89-page Teacher's Guide, there is a section for each of the six database files which includes teacher instructions, ways to get started, reasons for endangerment, description of database, sample record, student activity sheets and answer key.

PRODUCER POLICIES: Free 30-day trial, plus lifetime replacement warranty. Not copy protected, producer expects data dfiles to be copied for classroom use. A 10-disk lab pack (plus teacher's guide) is available for teachers convenience ($177).

COMMENTS:

- Students should have a basic understanding of how to use Bank Street School Filer.

LIFE SCIENCE DATABASES FOR PFS:FILE

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Scholastic	$99.95	AP IB	6-12	Life Science	Data	PFS:file (PFS:report)

SYSTEM REQUIREMENTS: 64K Apple IIe/IIc; 128K IBM PC/PCjr. Monitor, disk drive, printer.

SOFTWARE DESCRIPTION: Two disks, plus backups and teacher's handbook. Allows students to study relationships among the characteristics and environments of living organisms. There are three independent files. "Bird Migration" includes over 230 birds and information on their migratory status, arrival and departure dates, habitats, and major food sources. The file is designed so students can later add data on birds that are found throughout the year in their local area. "Animals" covers such attributes as trophic level, weight, blood pressure, heart rate, habitat, and biome of over 130 animals from the duck-billed platypus to the blue whale. Students may investigate the attributes of particular animals as well as relationships among those attributes. "Animal Biological Systems" is a file of over 90 animals with descriptions of 10 different systems for each including skeletal, nervous, circulatory, sensory and endocrine systems. It also contains other information such as the phylum, class and system organization level. Each data file has a supplementary printed unit of eight to ten activities which allow for a wide range of grade and skill levels. Each unit begins with activities suitable for a sixth grader, then progresses to the more difficult. In the teacher's handbook, two other units are described which help students create original files. For these, students must research information. In "Wild Flowers" students learn how to use key words to categorize in a database. The second unit, "Drugs," focuses on the effects of legal and illegal drugs in the body. Each unit includes one file design (on paper), a unit containing eight activities that teach students how to construct the file, teaching materials, including activity-by-activity lesson plan charts. In all units, students may conduct research projects, organize information, develop and test hypotheses.

SUPPLEMENTARY MATERIALS: A 285-page comprehensive User's Handbook includes teaching guide, quick guide (for using PFS:file), curriculum activity units, templates and glossary for each separate Curriculum Database. Also included is a mini reference for PFS:file and report. The teaching guide includes classroom and software management tips, teaching tips, content overview, and scope and sequence charts.

PRODUCER POLICIES: 30-day preview. 60-day warranty; the following ten months require a $10 replacement fee.

Life Sciences Database (cont)

EVALUATIONS:

1. Recommended. More motivating approach to teaching science than traditional methods. Excellent teacher documentation. Databases are relatively small (approx. 70 records each). Requires purchase of PFS:file and PFS:report, if not already available. Concepts simpler than stated grade level. Evaluations: Microware. British Columbia Educational Media Center, March 1986.

2. Recommended as desirable. Extensive manual, lesson plans and worksheets. Manual provides thorough introduction to using databases. Covers range of activities from using, to modifying, to creating files; many suggested questions and activities. Some data are questionable. Technology in the Curriculum: Science Resource Guide. California State Department of Education, 1986.

COMMENTS:

- The producer suggests the teacher have an understanding of computerized information handling, and a working knowledge of PFS:file before introducing to a class.

- It is a good idea to begin with one of the three data files before having the class create their own.

- Extensive teacher supplementary material supports all levels of database use--including designing, creating, and updating or modifying.

- The data files are very large and searches can take a long time.

- The files are unprotected and it is easy to change the data without intending to.

PHYSICAL SCIENCE DATABASES FOR PFS:FILE

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Scholastic	$99.95	AP IB	6-12	Physical Science	Data	PFS: file (PFS: report)

SYSTEM REQUIREMENTS: 64K Apple IIe/IIc; 128K IBM PC/PCjr. Printer.

SOFTWARE DESCRIPTION: Two disks, plus backups and teacher's handbook. There are three data files. "Chemical Elements" includes data on over 75 elements listing properties such as those in a periodic table, plus data such as the thermal and electrical conductivity. "Common Substances" investigates the properties of over 70 substances from white pine to natural gas and the relationships among them. The kinds of data include boiling and melting points, color, odor, heat content, hardness and common uses. Students may investigate the properties of particular substances as well as the relationships among those properties. "Chemical Tests" contains over 50 substances and four tests (flame, acid, starch, and borax bead) that help identify them. The latter two files are also designed so that students can add other substances and tests that are of interest to them. Each data file has a supplementary printed unit of eight to nine activities which allow for a wide range of grade and skill levels. Units begin with activities suitable for a sixth grader, then progress to the more difficult. In the teacher's handbook, two other units are described which help students create original files, "Glues and Adhesives" and "Stains and Solvents."

SUPPLEMENTARY MATERIALS: A 248-page comprehensive User's Handbook includes teaching guide, quick guide (for using PFS:file), curriculum activity units, templates and glossary for each curriculum database. The teaching guide includes a classroom overview, and scope and sequence charts.

EVALUATION:

1. Recommended with little or no change. Good program for teaching how to use data retrieval capabilities of the computer to analyze and test hypotheses. The contents of the files are almost identical to the process. Chemical formulas difficult to read due to lack of subscripts. Requires close teacher supervision to avoid contamination of the data. MicroSIFT Courseware Evaluation. Northwest Regional Educational Laboratory, October 1985.

2. Recommended. More motivating approach to teaching science than traditional methods. Excellent teacher documentation. Databases are relatively small (approx. 70 records each). Requires purchase of PFS:file and PFS:report, if not already available. More appropriate to grades 5-10 than the stated 6-12. Evaluations: Microware. British Columbia Provisional Educational Media Centre, February 1986.

EVALUATION (cont):

3. Recommended as desirable. Extensive manual, lesson plans and worksheets. Manual provides thorough introduction to using databases. Covers range of activities from using, to modifying, to creating files; many suggested questions and activities. Technology in the Curriculum: Science Resource Guide. California State Department of Education, 1986.

COMMENTS:

- Extensive teacher supplementary material will support all levels of database use--including designing, building and updating and modifying
- Teacher should have a good working knowledge of PFS:file and PFS:report before introducing to class
- The data files are large and searches can take a long time
- The files are unprotected and it is easy to change the data without intending to

PUBLIC DOMAIN DATA FILES FOR FILEVISION

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Telos	$1.50/file	AP	Various	Various	Data	FileVision

SYSTEM REQUIREMENTS: Apple Macintosh

SOFTWARE DESCRIPTION: Telos Software Products maintains over 100 public domain data files. Out of these, at least 13 are databases of interest to the science teacher. These include such topics as: meiosis, periodic chart, galaxies, an archaeological dig and an eye diagram. Each record includes visual information as part of the data. Some files are only templates and need more data.

PRODUCER POLICIES: The public domain data files are available to registered FileVision users.

COMMENTS:

- Contact the producer for a catalog of files and an order form
- Purchaser selects only the desired files; it is not necessary to buy all

SCIENCE FILES

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
John Hayes	$22.00	AP	7-12	Science	Data	FileVision

SYSTEM REQUIREMENTS: Apple Macintosh

SOFTWARE DESCRIPTION: Seventeen files created by a science teacher--"a full science curriculum." Files include: Astronomy, World Geography, Earth's History, Evolution of Earth's Continents, Wind Currents, Earthquakes, Faults, Volcanoes and Hot Spots, Periodic Table, Transuranic Elements, Electrons and Orbits. Periodic Table, for example, contains 33 separate fields of information for 109 elements. These files also include maps (for example, global wind belts and ocean currents), and diagrams (showing electron orbitals). Each file can be expanded and adapted to the individual's needs. The graphics may be reused in new files.

PRODUCER POLICIES: All requests will be mailed by certified mail the same day the order is received.

SCIENCE AND NATURE FACTS: FRIENDLY FILES

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Grolier	$16.95	AP CO IB	3-9	Science Nature	Data	Friendly Filer

SYSTEM REQUIREMENTS: 64K Apple IIe/IIc/II+; IBM PC/PCjr/XT; Commodore 64

SOFTWARE DESCRIPTION: One disk and a user's pamphlet. There are two databases on each side. Side A includes "Manned Spaceflight" which lists 105 spaceflights by mission name, country of origin, launch data, touchdown data, and a notable event from each of the flights. "Space and Nature Reading Guide" is a database of more than 50 books on flowers, animals, and spaceflight. Includes title, author, date of publication, publisher, subject, and reading level. On side B, "Mammals of North America" details approximately 110 mammals including common and scientific name, the zoological order and family, survival status, head and body length, and weight. "Wildflowers of North America" includes the common and scientific name, the family name, color and shape, height, habitat, and flowering season for more than 140 wildflowers. A limited amount of information may be added to any of the files.

SUPPLEMENTARY MATERIALS: The seven-page resource guide lists questions you can research in each file. Describes how to use Friendly Filer in conjunction with an existing database, and suggests ways to set up files on a new database.

PRODUCER POLICIES: Free 30-day evaluation period.

COMMENTS:

- Recommended for younger students. It is extremely easy to use, but also limited in what an older student may wish to explore.
- The user may add six more files to Side A and three more files to Side B. Each file can contain no more than three fields. If more fields are needed, fewer files can be created. For a larger database, a new disk may be used.
- The teacher needs to know how to use Friendly Filer before using the database.

CLASSIFICATION

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
MECC	$29.00	AP IB	6-9	Animals General	Ded.	None

SYSTEM REQUIREMENTS: 48K Apple or 128K IBM PC/PCjr. Printer optional.

SOFTWARE DESCRIPTION: Contains one disk, a backup and a 48-page teacher's guide. Students use a simple database inquiry system on the computer to enter, search, and sort data. The lessons relate to animals in particular, but could be used with other topics dealing with information, storage, classification and retrieval. Lesson one classifies animals; lesson two identifies animal attributes; and lesson three creates and uses a database called Classlist, in which students enter information about themselves.

SUPPLEMENTARY MATERIALS: Teacher's Manual includes learning objectives and vocabulary, three detailed lessons, appendices detailing teacher preparation, masters for handouts and quizzes plus answer keys.

PRODUCER POLICIES: LabKits are available for $89. These include a manual and five diskettes. Help line--612/481-3660. Unconditional lifetime guarantee; any materials may be returned within 30 days for a refund.

COMMENTS:

- This program is intended to be used with the printed activities.

EVALUATION:

1. Not recommended for use. Good program for exploring database organization and function. Very thorough support activities, masters and worksheets. Data can be created for any content area. Program does not focus on classification. MicroSIFT Courseware Evaluation. Northwest Regional Educational Laboratory, May 1984.

BOLT SCIENCE PROCESSORS

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Bolt		AP	1-6	Science	Ded.	None

SYSTEM REQUIREMENTS: 128K Apple IIe/IIc. Printer optional.

SOFTWARE DESCRIPTION: Contains one program disk, several data disks, a User's Manual and six teacher planning books. Features traditional database functions plus special built-in tools, such as the ability to graph. Animals, solar system, food and nutrition, and chemistry are the topics. Activities could include: Create an animal. Predict the winner in a race between two animals, and check the database to see who wins. How much do you weigh on Saturn? How long would it take you to travel between Mercury and Mars on a bicycle? What did I just eat (illustration of nutrient graph inside of stomach outline)? How long would you have to sit to burn 100 calories? (Publisher's description)

SUPPLEMENTARY MATERIALS: General user's manual; and for each of the six grades an activity master book, including teaching plans and reproducible worksheets.

COMMENTS:

- Release scheduled in mid-1987.

INFORMATION LABORATORY SOFTWARE: LIFE SCIENCE

PRODUCER	COST	HARDWARE	LEVEL	TOPIC	TYPE	REQ.SOFTWARE
Addison-Wesley	$69.95	AP	7-10	Life Science	Ded.	None

SYSTEM REQUIREMENTS: 128K Apple II series, monitor, printer

SOFTWARE DESCRIPTION: This is a database arranged like a card catalog in a library. It contains over 700 data cards with more than 100 illustrations. The data in this database covers 18 subject areas, such as cell biology, ecology, human anatomy, health, heredity, microorganisms, and plants and animals. The data is presented in three different ways. One is by "Subjects," which is like a major subject heading in a card catalog. The sort called "Table of Contents" sort groups the data according to the lesson topics in the companion workbook's table of contents. The data is also presented by "Decks." The decks are minisubject groupings (like a deck of cards), and students have the option of creating their own decks. The cards can be viewed directly, or through one of the previously mentioned filters.

SUPPLEMENTARY MATERIALS: Accompanying the software is a 30-page Teacher's Guide and Student Tutorial. These explain the program and the hierarchical structure of the data. Master Search Sheets are guides for finding data. They are broken into three categories: reteaching, reinforcement and enrichment. Finally, there are direction and answer sheets for the teacher on each of the textbook subject areas.

PRODUCER POLICIES: Do not duplicate. Also available Lab Packs of 10 disks or an on-site license.

COMMENTS:

- Requires little teacher supervision
- The design of this database is unlike most database systems; it is similar to a library catalog system

PRODUCER INFORMATION

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Grolier Electronic Publishing, Inc.
Sherman Turnpike
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Holt, Rinehart and Winston
CBS Educational and Professional Publishing
383 Madison Avenue
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John Hayes
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Minnesota Educational Computing Corporation
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